

IN THE CLAIMS

1. (Canceled)

2. (Canceled)

3. (Currently Amended) The traffic management processor of Claim 24, wherein the CAM device is configured to compare ~~a~~the specified flow ID with the packet flow ID's to generate match conditions.

4. (Currently Amended) ~~The traffic management processor of Claim 3, A traffic management processor for selectively terminating individual traffic flows, each including any number of packets, comprising:~~

a queuing mechanism for queuing the packets for transmission;  
means for receiving a termination instruction specifying a traffic flow to be terminated; and  
means for deleting packets belonging to the specified traffic flow from the queuing mechanism, wherein the means for deleting comprises:

a content addressable memory (CAM) device having a plurality of rows, each for storing a flow identification (ID) for a corresponding packet, the flow ID indicating which traffic flow the packet belongs to, and having an input to receive a specified flow ID from the termination instruction, and a plurality of termination bits, each indicating whether a corresponding packet is to be deleted from the queuing mechanism.

5. (Original) The traffic management processor of Claim 4, wherein the termination bits are stored in corresponding rows of the CAM device.

6. (Original) The traffic management processor of Claim 4, wherein the termination bits are selectively asserted in response to the match conditions.

7. (Currently Amended) A traffic management processor for

selectively terminating individual traffic flows, each including any number of packets, comprising:

    a departure time table having a plurality of rows, each for storing a departure time for a corresponding packet;

    an instruction decoder having an input to receive a termination instruction indicating which traffic flow is to be terminated; and

    a content addressable memory (CAM) device having a plurality of rows, each for storing a flow identification (ID) and a termination bit for a corresponding packet, the flow ID indicating which traffic flow the packet belongs to and the termination bit indicating whether the corresponding packet is to be deleted.

8. (Original) The traffic management processor of Claim 7, wherein each row of the CAM device is coupled to a match line and to a word line, wherein each match line is configured to selectively drive the corresponding word line.

9. (Original) The traffic management processor of Claim 7, wherein the CAM device is configured to compare a specified flow ID with the packet flow ID's to generate match conditions.

10. (Original) The traffic management processor of Claim 9, wherein the termination bits are selectively asserted in response to the match conditions.

11. (Original) The traffic management processor of Claim 10, wherein the asserted termination bits select corresponding entries in the CAM device and in the departure time table to be deleted.

12. (Original) The traffic management processor of Claim 7, wherein the termination instruction further comprises a specified traffic type indicator that indicates which type of traffic is to be terminated.

13. (Canceled)

14. (Currently Amended) The method of Claim 1319, wherein the determining comprises:

comparing a specified flow ID with the flow ID's of the queued packets.

15. (Original) The method of Claim 14, wherein the selectively deleting comprises:

asserting a termination bit corresponding to each packet that belongs to the traffic flow specified by the termination instruction.

16. (Original) The method of Claim 15, further comprising:  
generating a next free address for queuing incoming packets in response to the asserted termination bits.

17. (Canceled)

18. (Canceled)

19. (Currently Amended) The method of Claim 18, wherein the ascertaining comprises: A method for selectively terminating individual traffic flows, comprising:

queueing a plurality of packets, each including a flow identification (ID) indicating which traffic flow the packet belongs to;

receiving a termination instruction specifying a traffic flow to be terminated and further specifying which types of traffic are to be terminated;

determining whether the queued packets belong to the traffic flow specified by the termination instruction;

ascertaining whether the queued packets are of the traffic type specified by the termination instruction; and

selectively deleting the queued packets in response to the determining and the ascertaining, wherein the ascertaining comprises comparing a traffic type indicator

specified by the termination instruction with a traffic type indicator for each queued packet.

20. (Canceled)

21. (Currently Amended) The method of Claim 2024, further comprising:

generating a next free address for queuing incoming packets in response to the termination bits.

22. (Canceled)

23. (Canceled)

24. (Currently Amended) The method of Claim 23, wherein the determining comprises: A method for selectively terminating individual traffic flows, comprising:

queueing a plurality of packets, each including a flow identification (ID) indicating which traffic flow the packet belongs to;

receiving a termination instruction indicating which traffic flow is to be deleted and specifying which types of traffic are to be terminated;

comparing a specified flow ID with the flow ID's of the queued packets to generate match conditions;

selectively asserting a termination bit for each queued packet in response to the match conditions;

determining whether the queued packets are of the traffic type specified by the termination instruction; and

selectively deleting the queued packets in response to the termination bits and the determining, wherein the determining comprises comparing a traffic type indicator specified by the termination instruction with a traffic type indicator for each queued packet.